

Title	Referentiality of Noun Phrases in Japanese Existentials
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Citation	OUPEL(Osaka University Papers in English Linguistics). 9 p.53-p.65
Issue Date	2004
oaire:version	VoR
URL	<a href="https://doi.org/10.18910/70793">https://doi.org/10.18910/70793</a>
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## REFERENTIALITY OF NOUN PHRASES IN JAPANESE EXISTENTIALS\*

### 1 INTRODUCTION

Over the past few decades, a considerable number of studies have been made on the relation between a noun phrase and its referent, discovering that numerous noun phrases can be categorized in accordance with that relation. Nishiyama (2003) and others suggest noun phrases being distinct with at least two types: referential noun phrases and non-referential noun phrases. Brief elucidation of this difference goes as follows: the former refers to an object that exists or existed in the actual world and the latter does not. As the sentences below demonstrate, each underlined is clearly referential or identifies something that exists/existed in the real world:

- (1) a. Kare-wa ko-nai.  
he-TOP come-NEG  
'He does not come.'
- b. Koko-ni hon-ga aru.  
here-LOC book-NOM be  
'There is a book here.'
- c. Watasi-no suki-na sakkyokuka-wa Syopan-de-nai.  
my-GEN favorite composer-TOP Chopin-COP-NEG  
'My favorite composer is not Chopin.'

On the other hand, non-referential noun phrases are twofold, i.e., predicative and variable. Predicative noun phrases, underlined below, behave like simple adjectives, as in (2). Above all, more salient are predicative noun phrases in French, which do not involve any indefinite articles, *un*, *une*, and *des*, although referential readings call for indefinite articles:

- (2) a. Watasi-wa gakusee-desu.  
I-TOP student-COP

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\* I gratefully acknowledge encouragement by Seisaku Kawakami and Yukio Oba. Special thanks extend to Hidetake Imoto and Yusuke Minami for aid and critical comments. I owe proof reading to Paul A. S. Harvey. Responsibilities for any errors in this article, of course, belong to me.

- ‘I am a student.’
- b. Bahha-wa idai-na sakkyokuka-da.  
 Bach-TOP great composer-COP  
 ‘Bach is a great composer.’
- c. Mon mari est étudiant. (predicative)
- d. Mon mari est un étudiant. (referential)

In (3), variable noun phrases underlined refer to someone/something (i.e., a variable x) that satisfies their connotation instead of behaving like adjectives:

- (3) a. Watasi-no suki-na sakkyokuka-wa Beetooben-desu.  
 my-GEN favorite composer-TOP Beethoven-COP  
 ‘My favorite composer is Beethoven.’
- b. Natubasyo-no yuusyoosya-wa dare-desu-ka.  
 summer-tournament-GEN champion-TOP who-COP-Q  
 ‘Who is the champion of the summer tournament?’

Note that each noun phrase underlined in (3) can be referential in the following context:

- (4) a. Tonari-no heya-ni watasi-no suki-na sakkyokuka-ga iru.  
 next-GEN room-LOC my-GEN favorite composer-NOM be  
 ‘My favorite composer is in the next room.’
- b. Kokugikan-ni natubasyo-no yuusyoosya-ga iru.  
 Sumo-Arena-LOC summer-tournament-GEN champion-NOM be  
 ‘The champion of the summer tournament is in the Sumo Arena.’

The present study is concerned with what some types of noun phrases refer to, and the characteristics of those allowed in Japanese existentials in terms of the role and value interpretations, maintained in mental space theory (Fauconnier 1994). The main goals are to point out the impossibility of differentiating between *location existentials* and *absolute existentials*, which has been hitherto discussed in the conventional analyses of grammar, and to clarify how to interpret the noun phrases according to the specificity of the locative adverbials accompanied by the existential sentences.

## 2 LOCATION EXISTENTIALS AND ABSOLUTE EXISTENTIALS

### 2.1 Location Existentials

The grammaticality of existential sentences in a variety of languages has intrigued most linguists from different standpoints, and each study has adequately stated their general traits, especially on what type of NP qualifies as a subject in existential

sentences. A widespread generalization on location existentials (henceforth, LEs) is that ‘some object exists at a certain location.’ Masuoka and Takubo (1992) make significant references to a solid attribute, stating that an LE is based on the form ‘<the location>-*ni* + <the subject>-*ga* + *iru/aru*’:

- (5) a. Asoko-ni            Hae-ga    iru.  
           over-there-LOC fly-NOM be  
           ‘There is a fly over there.’  
       b. Ano-hen-ni            tennis-kooto-ga    aru.  
           there-around-LOC tennis-court-NOM be  
           ‘There is a tennis court around there.’

It follows from (5) that (i) an LE involves a locative adverbial; (ii) it expresses the referent occupying a certain location; (iii) the subject of the sentence is referential. In Nishiyama’s (2003) exposition, there are four other types in Japanese existentials with locative adverbials, which we need not reflect upon here in detail because of our concern only with location and absolute existentials.

## 2.2 Absolute Existentials

(6) is of the other type, i.e., absolute existentials (henceforth AEs), which are a representative type of existential accompanied by *no* locative adverbials. According to Nishiyama, there are four other categories as well in this category, which are not necessary to deal with thoroughly here:

- (6) a. 100m-o    3-byoo-de    hasir-eru ningen-wa    i-nai.  
           100m-ACC 3-seconds-in run-can person-TOP be-NEG  
           (lit.) ‘People who can run 100m in 3 seconds do not exist.’  
       b. Kimitati-no-naka-ni Yooko-o    korosita hito-ga    iru.  
           you-GEN-among-LOC Yoko-ACC killed person-NOM be  
           (lit.) ‘The person who killed Yoko exists among you.’

The proposition of (6a) is not that a particular person that runs 100m in 3 seconds (say, John) does not exist. In lieu of this, the speaker solely declares that nobody has the ability to run 100m in 3 seconds. In (6b), *kimitati-no-naka-ni* fails to be a locative adverbial that signifies an actual space, and its implication is that one of you must have killed Yoko and that the speaker does not identify who the murderer is. These NPs in (6) are not considered to be referential because they cannot allude to any actual objects (although the LE subjects can, as in (5)), and then (6) must be semantically equivalent to (7):

- (7) a. Dare-mo 100m-o    3-byoo-de    hasir-e-nai.  
           anyone 100m-ACC 3-seconds-in run-can-NEG  
           ‘No one can run 100m in 3 seconds.’

- b. Kimitati-no-naka-no dareka-ga Yooko-o korosita.  
 you-GEN-among-GEN someone-NOM Yoko-ACC killed  
 ‘Someone among you killed Yoko.’

Several observations have demonstrated that (i) an AE does not involve any locative adverbials; (ii) it does not express the referent occupying a certain location but just expresses whether or not the referent exists; (iii) the subject of the sentence is variable.

Furthermore, Nishiyama illustrates that AEs can be restated in the following manner:

- (8) a. The value of x satisfying [x is a person who can run 100m in 3 seconds] is empty.  
 b. The value of x satisfying [x is a person who killed Yoko] is one of you.

Masuoka and Takubo (1992) uphold an observable fact that *aru*, which is generally usable only with an inanimate subject, is to be exploited as the verb of the existential with an animate subject. Actually, their exploration into how *aru* is appropriate along with an animate subject is attributed to the fact that AEs denote existence in itself rather than existence at a certain location. In addition, per Nishiyama’s overview, given that AEs serve to state whether or not the value of x exists, *aru* is possible on account of the value in itself, which is an inanimate subject. Exemplified below, (9) only affirms the plain existence of the value satisfying [x is a person who says something like this], and, as might be expected, the value is inanimate, which enables *aru* to crop up as a verb:

- (9) Kon’na koto-o iu hito-ga aru.  
 this-like something-ACC say person-NOM be  
 (lit.) ‘A person who says something like this exists.’
- (10) The value of x satisfying [x is a person who says something like this] is not empty.

### 2.3 Problems with Locative Adverbials

**2.3.1 Are Locative Adverbials Obligatory for Existentials?** It is generally agreed that English *there*-constructions want locative adverbials and they should be pragmatically specified without any locatives in sight. There still remain some problems with the way they are specified. (11) clearly shows that the relevant locative adverbials are not entirely identified even with plentiful plausible contexts.

- (11) a. There are many people who don’t like rice.  
 b. There are *there*-sentences that lack locatives.

To argue English existentials to the fullest would carry us too far away from the

purpose of this study. However, unless it is apparent how to spell out the locative adverbials from the context, we might not proceed to the conclusion that they require locative adverbials.

**2.3.1 Disambiguation** Nishiyama (2003) strongly supports the unambiguous distinction between Japanese LEs and AEs, shedding light on the subject NP's referentiality, which is a referent and a variable, and a locative adverbial. With a locative, the relevant sentence is an LE whereas it is an AE without any locatives, because AEs do not presuppose any objects or referents existing in the actual space. If AEs only entail the existence of a value, locatives are certain to vanish. This, however, does not hold good in the case below, whose NP is taken to be either a referent or a variable:

- (12) Kono-mura-ni Huransugo-o hanasu hito-ga iru.  
 this-village-LOC French-ACC speak person-NOM be  
 'There is a person in this village who speaks French.'

When *Huransugo-o hanasu hito* is a referent, *kono-mura-ni* functions as a locative adverbial specifying an actual space in the world. Interestingly, Nishiyama points out that, when *Huransugo-o hanasu hito* is a variable, *kono-mura-ni* should not be a locative but only delineate the range in which the variable *x* is taken. Therefore, *kono-mura-ni* plainly implies 'of all the members living in this village,' and (12) should be translated in Nishiyama's fashion as in (13):

- (13) The value of *x* satisfying [*x* is a person who speaks French] belongs to this village.

In this interpretation, we are in a better position to say that *kono-mura-ni* is in use for offering an attribute (for instance, *come from this village*) to *Huransugo-o hanasu hito*. This reading is comparable to the sentence 'someone that comes from this village speaks French,' which undertakes that the person is not necessarily present in this village at the time of utterance.

**2.3.2 Ramifications** The crucial weakness in Nishiyama's (2003) postulation is *how* we are able to think of (12) as an LE or an AE and why typical LEs, such as (5), should not be interpreted as an AE. The basis of his generalization about AEs, as shown above, appears to hinder us from predicting whether AEs should bear locatives or not. Put another way, what is the substantial discrepancy between the AEs in (6) and those in (12), with no locatives in (6) and *kono-mura-ni* in (12)? Are they totally taken apart from each other?

More explicitly, if the sentence (12) with a locative phrase is an AE, there is no reason to deny that such a typical LE as (5) can be restated in the manner of (8). Provided that the depiction in (15) is right, we must doubt whether the discrimination of LEs and AEs hinges on locative adverbials. (14a) and (14b) correspond to (15a) and (15b) respectively. Is each of the sentences below an AE or an LE:

- (14) a. Asoko-ni            Hae-ga iru.  
           over-there-LOC fly-NOM be  
           ‘There is a fly over there.’  
       b. Ano-hen-ni            tenisu-kooto-ga aru.  
           there-around-LOC tennis-court-NOM be  
           ‘There is a tennis court around there.’
- (15) a. The value of x satisfying [x is a fly] exists over there.  
       b. The value of x satisfying [x is a tennis court] exists around there.

We have thus far considered that (12) is noticeably ambiguous. On an LE reading, at least one person with the ability to speak French exists at a location specified as *kono-mura-ni*, whether he/she comes from that village or not; on an AE reading, at least one person that is a villager of that village can speak French. In this sense, Nishiyama says that (16) is ambiguous as well. In (16), *kono-mura-ni* in (12) is replaced by *tonari-no heya-ni*:

- (16) Tonari-no heya-ni    Huransugo-o hanasu hito-ga    iru.  
       next-GEN room-LOC French-ACC speak person-NOM be  
       ‘There is a person in the next room who speaks French.’

The domain that *tonari-no heya* in (16) refers to is believed to be smaller than the one that *kono-mura* does in terms of the area of the space. Because of this, our intuition directs (16) to an LE. Nishiyama posits that it has two readings, however. A narrowly plausible situation is, according to him, when the speaker utters (16) when she has a phone call from an unknown French person, having trouble talking in that French. He regards (17) as having the same truth-value as (16):

- (17) Someone in the next room speaks French.

However, are the two readings given in (12) equal to those in (16)? Even in the context that Nishiyama gives to the sentence in (16), which is about a telephone call from an unknown French, our intuition only permits *tonari-no heya-ni* to be a locative. Even though (16) and (17) are perfectly matched, the interpretation is not ‘someone that comes from the next room can speak French,’ as in (12).

Lastly, we see how the use of *aru*, as in (9), is applicable to AEs. The perfect acceptance in (9) results from *kon’na koto-o iu hito* referring to the variable x, which is typical in AEs. (9) brings about the existence of the value, that is, an inanimate entity, which renders *aru* possible as a verb in (9). Then, can we extend this use to (12) or (16)? Additionally, we must also be reminded that this particular practice of *aru* relies mainly on other factors, especially on socio-linguistic grounds:

- (18) a. ?Kono-mura-ni    Huransugo-o hanasu hito-ga    aru.  
           this-village-LOC French-ACC speak person-NOM be  
           ‘There is a person in this village who speaks French.’

- b. ?Tonari-no heya-ni Huransugo-o hanasu hito-ga aru.  
 next-GEN room-LOC French-ACC speak person-NOM be  
 ‘There is a person in the next room who speaks French.’

### 3 ROLE, PARAMETER AND VALUE

This article emphasizes that the concepts of role, parameter and role are of better assistance in dealing with the unsettled problems above. Let us here briefly clarify each concept. In Fauconnier’s (1994) idea, a role, which is given by the meaning or descriptive content of an NP, is a kind of function which ranges over parameters such as time, situation, context, and so on, and chooses a suitable value from the set of objects satisfying the descriptive content. It is entirely reasonable that we think of variables developed in Nishiyama (2003) as roles. Consider a famous instance, which is frequently cited in explaining these concepts. The NP *president* is a role (function) whose domain and range are respectively a set of countries and a set of presidents, such as ‘president <USA> = Bush,’ ‘president <French> = Chirac,’ and so forth. When parameters are easily recoverable from the context, they may be omitted. Besides, contexts allow particular noun phrases to be both roles and values. In the previous case, ‘president’ is a role, but other situations are worth noting: ‘head of state <USA> = president’ or ‘head of state <Japan> = prime minister.’

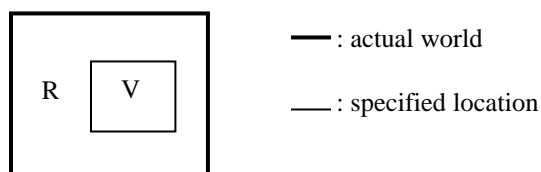
### 4 ANALYSIS: SPECIFICITY OF LOCATION

Suppose that the representations of noun phrases can be reduced to the concepts of ‘role,’ ‘parameter,’ and ‘value,’ we presuppose the following formula as proper depictions of noun phrases:

- (19) An NP is ‘R <P> = V’ or ‘R’  
 ‘R’ for role, ‘P’ for parameter, and ‘V’ for value.

Furthermore, when (19) is extended to noun phrases that show up in existentials, we are provided with (20), assuming that a parameter sets up a specified location where the noun phrase involved should be comprehended as a value rather than a role (variable):

- (20)



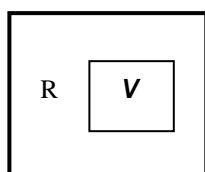


#### 4.1 Location Existentials

As noted, including a locative adverbial, the existential sentence fulfills the role of referring to a substantial referent denoted as a noun phrase. As regards (19), this referent is ‘V,’ which serves as a subject of the LE:

- (21) a. Tukue-no-ue-ni hon-ga aru.  
desk-GEN-on-LOC book-NOM be  
‘There is a book in the desk.’  
b. Kooen-ni Taro-ga iru.  
park-LOC Taro-NOM be  
‘Taro is in the park.’  
c. Tonari-no heya-ni harubasyo-no yuusyoosya-ga iru.  
next-GEN room-LOC spring-tournament-GEN champion-NOM be  
‘The champion of the spring tournament is in the next room.’

(22)



An LE comes with a specified location, which leads the noun phrase to be referential, no matter what type of noun phrase it might be. (21a) and (21b) are typical instances, but (21c) seems to be another because *harubasyo-no yuusyoosya* is likely to be labeled as a role. In this case, however, the location is obvious (*tonari-no heya-ni*), so the speaker should take for granted that there is at least one referent bearing the trait of the champion of the spring tournament in the next room. If the champion is Asashoryu and he is present in the next room, one can describe him either as *Asashoryuu* or as *harubasyo-no yuusyoosya* because of their totally identical references.

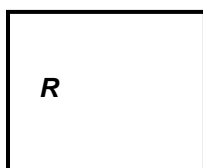
#### 4.2 Absolute Existentials

An AE does not permit the noun phrase to be referential owing to lack of locative adverbials. In relation to (19), the noun phrase in an AE is ‘R’ or a variable:

- (23) a. 100m-o 3-byoo-de hasiru hito-ga iru.

- 100m-ACC 3-seconds-in run person-NOM be  
 (lit.) 'A person who runs 100m in 3 seconds exists.'
- b. Watasi-no suki-na sakkyokuka-ga iru.  
 my-GEN favorite comperser-NOM be  
 (lit.) 'My favorite composer exists.'

(24)



Each of the noun phrases in (23) does not denote the actual referent within a certain location. The sentences in (23) are true when there is at least one element anywhere in the world that satisfies the attributes carried by the referent that the noun phrases represent.

However, there is a further point that needs to be made clear. The referent of a noun phrase ('V') is enabled to be present without any locative adverbials:

- (25) a. Taro-ga iru.  
 Taro-NOM be  
 (lit.) 'Taro exists.'
- b. Seesyo-ga aru.  
 The-Bible-NOM be  
 (lit.) 'The Bible exists.'

The sentences in (25) seem like median constructions between AEs and LEs, in which 'V' appears without any location specified. Why they are acceptable without any locative adverbials depends upon the context, which identifies what the certain location should be. For instance, (25a) might be saturated with *asoko-ni* (*over there*) in the final position or deictically, with your finger pointing to Taro. The same goes for (25b).

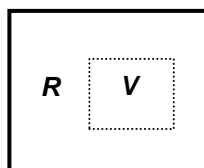
Even though the representations of (22) and (24) are clear-cut ends, we are confronted by median constructions between them. Reconsider (26):

- (26) Kono-mura-ni Huransugo-o hanasu hito-ga iru.  
 this-village-LOC French-ACC speak person-NOM be  
 'There is a person in this village who speaks French.'

(26) is surely ambiguous because of the specification of the locative adverbials. If the locative adverbial *kono-mura-ni* denotes a specific location, this is an LE. Alternatively, if the locative adverbial is not an actual location but conveys extended implications about *kono-mura*, this is an AE. The latter situation would facilitate the person who can speak French to be outside this village, for *kono-mura-ni* fails to refer to a real space, only substituted by other extended expressions such as

*kono-mura-syussin-no* (*from this village*). As a result, the noun phrase occurring in this indistinct version should be ‘R’ or ‘V,’ resting upon whether the locative adverbial touches on a physical space expression or only transmits widened implications about the location.

(27)



#### 4.3 The Area of Location

We have shown that the reference of a locative adverbial within an existential crucially assigns ‘R’ or ‘V’ to the noun phrase. This leads us to suppose that the extent to which a locative phrase should be specific lies much on the area of the location that it denotes; thus, the smaller the area is, the more specific the locative adverbial might be, and vice versa. Also, the fact that the larger the area of the location is, the less specific it might be calls forth the possibility of pseudo-locative adverbials, such as *between 5 and 10* or *among you*, coming with existentials:

(28)

<p>specific locative</p> <p>‘on the desk’</p> <p>‘in the park’</p>	<p>less specific/ pseudo-locative</p> <p>‘in this village’</p> <p>‘in Japan’</p> <p>‘among you’</p> <p>‘between 5 and 10’</p> <p>‘as for Taro’</p> <p>‘on the previous tournament’</p>	<p>no locative</p>

Let us here examine the noun phrases on LEs and AEs. While noun phrases of LEs do

not prove role interpretations, those of AEs show both role and value interpretations:

- (29) a. Tukue-no-ue-ni hon(?‘R’/‘V’)-ga aru.  
 desk-GEN-on-LOC hon-NOM be  
 ‘There is a book on the desk.’  
 b. ?There is a book that is/comes from the desk.
- (30) a. Tonari-no-heya-ni Huransugo-o hanasu hito(?‘R’/‘V’)-ga iru.  
 next-GEN-room-LOC French-ACC speak hito-NOM be.  
 ‘There is a person in the next room who speaks French.’  
 b. ?There is a person who comes from the next room and speaks French.

They are distinctive LEs with locative adverbials. Not being able to construe the noun phrases as ‘R’ precludes the locative adverbials from being enlarged to less specific locative expressions, such as *come from* and so on. That is why each sentence in (b) is unnatural because the locative adverbials are looked upon as less specific.

Finally, instances with pseudo-locative adverbials, which are less specific, trigger the noun phrases to culminate in both ‘R’ and ‘V’:

- (31) a. Kono-mura-ni Huransugo-o hanasu hito(‘R’/‘V’)-ga iru.  
 this-village-LOC French-ACC speak person-NOM be  
 ‘There is a person in this village who speaks French.’  
 b. There is a person who comes from this village and speaks French.  
 c. Kono-mura-ni Tom(‘V’)-ga iru.  
 • Tom = a person who speaks French
- (32) a. Kimitati-no-naka-ni Yooko-o korosita hito(‘R’/‘V’)-ga iru.  
 you-GEN-among-LOC Yoko-ACC killed person-NOM be  
 ‘There is a person among you who killed Yoko.’  
 b. Kimitati-no-naka-ni Hanako(‘V’)-ga iru.  
 • Hanako = the person who killed Yoko
- (33) a. 5-to-10-no-aida-ni sosuu(‘R’/‘V’)-ga aru.  
 5-and-10-between-LOC prime-number-NOM be  
 ‘There is a prime number between 5 and 10.’  
 b. 5-to-10-no-aida-ni 7(‘V’)-ga aru.  
 • 7 = a prime number
- (34) a. Taro-ni-wa koibito(‘R’/‘V’)-ga iru.  
 Taro-LOC-TOP lover-NOM be  
 (lit.)‘There is a lover as for Taro.’  
 b. Taro-ni-wa Mary-ga(‘V’) iru.  
 • Mary = Taro’s lover
- (35) a. Senbasyo-ni Kantoosyoo-zyusyoosya(‘R’/‘V’)-ga ita.  
 previous-tournament-LOC winner of Kantosho-NOM was

- ‘There was a winner of Kantosho on the previous tournament.
- b. Senbasyo-ni Kyokusyuuzan(‘V’)-ga ita.  
 • Kyokushuzan = the winner of Kantosho

## 5 CONCLUDING REMARKS

In this paper, we have thus far investigated the relationship between the referentiality of noun phrases and the existential sentences in which they appear. Reference to the concepts of role, parameter, and value makes it quite easy to cope with the complications relevant to different types of noun phrases. This is, then, reflected in the grammaticality of existentials, which basically invokes what the noun phrase refers to. Actually, one can safely state that the representations of noun phrases should be reduced to ‘R’ and ‘V,’ which are associated with the specificity of locative adverbials for the purpose of proper interpretation. Simply put, ‘V’ has a locative adverbial involved while ‘R’ does not. In particular, emphasis has been placed on the impossibility of a clear-cut distinction between LEs and AEs, insisting that the difference should be gradable. We have suggested that the larger the area is, the less specific the locative adverbial might be, so that some types of sentences can be thought to be ambiguous because they are undoubtedly neither LEs nor AEs.

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